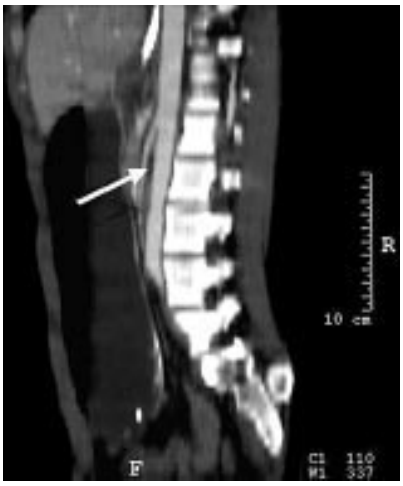

Figure 2 Multislice CT with intravenous contrast medium: sagittal reconstruction through mid-abdomen. The angle between the superior mesenteric artery and the aorta is reduced causing compression of the duodenum (arrow). Note grossly dilated stomach anteriorly.

12 and total parenteral nutrition was introduced for 6 weeks after which an exploratory laparotomy was performed. An anterior gastrojejunostomy was made and a jejunal feeding tube inserted into the collapsed proximal small bowel. The patient recovered postoperatively but continued to vomit after meals. After 4 weeks his BMI increased to 15, vomiting stopped, and he demanded food. At the time of writing he is well, independent, and on antiretroviral therapy.

Superior mesenteric artery syndrome is a controversial diagnosis synonymous with vascular compression of the duodenum, arteriomesenteric duodenal compression syndrome, the cast syndrome, chronic duodenal ileus, and Wilkie's syndrome. First described by Rokitansky in 1842, frequency of reports have recently declined and its existence debated.[1] The syndrome has been ascribed to a reduction in the angle between the aorta and the superior mesenteric artery, scissoring the duodenum in its third part causing obstruction. This is often because of sudden, severe weight loss resulting in a reduction of mesenteric and retroperitoneal fat. Precipitating factors include eating disorders, severe wasting conditions, prolonged immobilisation, previous abdominal surgery, or inflammatory conditions. It has also been reported in cases of severe kyphoscoliosis.[2] It has not previously been reported in AIDS.

Characteristic symptoms, typically intermittent in nature, comprise bloating, nausea, and intractable bilious vomiting relieved by adopting the prone or knee to chest position. A barium meal is the most useful diagnostic investigation. Features of note include dilatation of the first and second parts of the duodenum and an abrupt, linear hold up of flow to barium in the third with abnormal peristalsis and even reverse peristalsis frequently observed. Relief of the obstruction can in some instances be achieved by placing the patient prone during the investigation.[1–3] CT studies can demonstrate reduction in the aortosuperior mesenteric artery angle and serve as a non-invasive diagnostic tool.[4]

Reversal of weight loss is key to resolution, by surgical means if necessary. Nutritional support should be attempted first. Endoscopic or nasogastric decompression is often difficult because of severe gastric dilatation. Duodenojejunostomy or gastrojejunostomy are the surgical procedures of choice when medical therapy fails.[2 3] Our patient did not experience immediate symptomatic relief through surgery but did achieve rapid weight gain via jejunal feeding. We report the first case of SMA syndrome in a patient with AIDS. The spread of HIV worldwide and its association with severe wasting makes this an important differential diagnosis for the clinician.

R Stümpfle, A R Wright, J Walsh
St Mary's Hospital, Praed Street, London W2 1NY, UK

Correspondence to: Dr Richard Stümpfle, Department of Anaesthetics, Northwick Park Hospital, Watford Road, Harrow, Middlesex HA1 3UJ, UK; rstumpfle@doctors.net.uk

References

1 **Anderson JR**, Earnshaw PM, Fraser GM. Extrinsic compression of the third part of the duodenum. *Clin Radiol* 1982;**33**:75–81.
2 **Hines JR**, Gore RM, Ballantyne GH. Superior mesenteric artery syndrome. Diagnostic criteria and theraputic approaches. *Am J Surg* 1984;**148**:630–2.
3 **Lundell L**, Thulin A. Wilkie's syndrome—a rarity? *Br J Surg* 1980;**67**:604–8.
4 **Konen E**, Amitai M, Apter S, *et al.* Angiography of superior mesenteric artery syndrome. *Am J Roentgenol* 1998;**171**:1279–81.

Accepted for publication 16 December 2002

Was the Papanicolaou smear responsible for the decline of *Trichomonas vaginalis*?

There has been a dramatic decline in the prevalence of trichomoniasis in Australia over the past 30 years. In 1979, 17.8% of women attending a Sydney STI clinic had *Trichomonas vaginalis* infection.[1] By 1998 less than 1% of non-Indigenous women presenting to family planning and STI clinics in another jurisdiction were diagnosed with the condition[2] and most Australian urban pathology laboratories do not diagnose a case from one year to the next. Similar observations have been reported elsewhere: the rate of detection of trichomoniasis in Papanicolaou (Pap) smears in Denmark fell from 19% in 1967 to <2% in 1997,[3] and a study in Brazil found similar results (a peak of 17.3% in 1978, falling to 3.4% in 1998).[4]

In the absence of any health promotional activities relating to trichomoniasis and in a setting where the prevalence of another STI, *Chlamydia trachomatis,* has shown a fourfold *increase* in notifications in the past 10 years (Communicable Diseases Network Australia, National Notifiable Diseases Surveillance System, personal communication), what can explain the decline and fall of *T vaginalis*?

I propose that the change in prevalence is an unintended consequence of the introduction of coordinated Pap smear screening programmes in the 1970s and 1980s. As the Pap screening programmes gained momentum in the urban areas, a positive finding on the Pap smear, which has a sensitivity for the diagnosis of *T vaginalis* of around 50–60%, would have been conveyed to the referring medical practitioner who would treat the woman with metronidazole or tinidazole. In addition, the increasing use of these antibiotics for the treatment of other conditions, in particular bacterial vaginosis, may have further reduced the prevalence during the same period. As there are no cytological changes that are diagnostic of *C trachomatis*, Pap screening would be expected to have no effect on chlamydia prevalence.

In Australian urban populations the proportion of women undergoing Pap screening in the 20–40 year age group is approaching 70%. On the other hand, in some remote Aboriginal populations the introduction of coordinated screening has lagged behind urban areas[5] and trichomoniasis remains hyperendemic (prevalence of approximately 25%).[6]

(Of course these observations could be confounded by a number of factors: Pap screening rates correlate with socioeconomic status and the rate of partner change could be different between these groups. However, it has been shown that access to services is more important than differences in the rate of partner change when comparing STI rates in Indigenous and non-Indigenous populations in Australia.[2])

The Pap smear hypothesis could be tested by correlating the prevalence of trichomoniasis with the rate of cervical cancer screening in selected populations and through clinic based case-control studies. (The virtual absence of trichomoniasis in urban Australia means that this work must be performed in other populations.) If the prevalence of *T vaginalis* is related to Pap screening, a similar approach to chlamydia control—that is, routinely linking nucleic acid amplification testing for *C trachomatis* with the Pap smear, could also be considered.

Conflict of interest: None.

F J Bowden
Australian National University and Canberra Sexual Health Centre, PO Box 11, Woden ACT, Australia 2605; frank.bowden@act.gov.au

References

1 **Tapsall JW**, Puglisi J, Smith DD. Trichomonas vaginalis infections in Sydney: laboratory diagnosis and prevalence. *Med J Aust* 1979;**1**:193–4.
2 **Fairley CK**, Bowden FJ, Gay NJ, *et al.* Sexually transmitted diseases in disadvantaged Australian communities [letter]. *JAMA* 1997;**278**:117–18.
3 **Dragsted DM**, Farholt S, Lind I. Occurrence of trichomoniasis in women in Denmark, 1967–1997. *Sex Transm Dis* 2001;**28**:326–9.
4 **Adad SJ**, de Lima RV, Sawan ZT, *et al.* Frequency of Trichomonas vaginalis, Candida sp and Gardnerella vaginalis in cervical-vaginal smears in four different decades. *Sao Paulo Med J* 2001;**119**:200–5.
5 **Mak D**, Straton JA. Effects and sustainability of a cervical screening program in remote Aboriginal Australia. *Aust NZ J Public Health* 1997;**21**:67–70.
6 **Bowden FJ**, Paterson BA, Mein J, *et al.* Estimating the prevalence of Trichomonas vaginalis, Chlamydia trachomatis, Neisseria gonorrhoeae, and human papillomavirus infection in indigenous women in northern Australia. *Sex Transm Infect* 1999;**75**:431–4.

Accepted for publication 16December 2002

The HIV/AIDS epidemic in Ukraine: stable or still exploding?

A recent article published in *Sexually Transmitted Infections*[1] presented evidence suggesting that the HIV/AIDS epidemic in Ukraine had peaked in 1997 and has since declined. The world has only recently awoken to the threat of a widespread HIV/AIDS epidemic in eastern Europe, including projections of an

Table 1 Prevalence of HIV among injecting drug users, 2000

Site	HIV prevalence (%)	Sample size
Poltava	41.7	259
Donetsk	39.7	252
Kryvyi Rig	28.1	249
Odessa	64.0	293
Simferopil	27.2	261
Kharkiv	17.8	250

Source: Ministry of Health, HIV/AIDS Surveillance in Ukraine (1987–2000), Kyiv, Ukraine. p 30.

epidemic in Russia of between 6–11% by 2010, and the potential for economic decline and geopolitical instability.[2] HIV trends in Ukraine, with many of the same socioeconomic characteristics and risk factors found in Russia—namely, large numbers of injecting drug users (IDUs), an expanding sex industry, internal and external migration, poor access to health care, general economic and social upheaval, and a recent explosive syphilis epidemic—must therefore be examined closely. Could Ukraine present a model for Russia in terms of controlling the HIV epidemic, or does Ukraine in fact represent an ongoing epidemic inadequately described by official statistics?

The first indication that perhaps the data presented by Mavrov and Bondarenko[1] may not accurately reflect the ongoing HIV epidemic in Ukraine is the apparent contradiction in table 1, which reports the prevalence of HIV among select groups in 1998 and 1999. While HIV prevalence for "all populations" declined, every subpopulation increased, except for a decline from 0.07% to 0.064% among blood donors. Prevalence among pregnant women, who reflect the likely future of the epidemic, increased by 33%.

Current official statistics in Ukraine simply do not reflect the current status of the epidemic, and, importantly, do not reflect the likely future course of the epidemic. As Mavrov and Bondarenko report, the majority of new HIV cases continue to be among IDUs. This population is wary of the healthcare sector, as the acknowledgement of drug use to a healthcare provider leads to obligatory registration and confinement for treatment, possible job loss, loss of one's driving licence, and criminal prosecution. Kobyshcha[3] reported that only 5% of IDUs were covered by the current system of HIV surveillance. Rather than the 8.6% prevalence reported by Mavrov and Bondarenko among IDUs, cross sectional studies have shown prevalence of between 18% and 64% (table 1).

Behavioural factors also argue against the likelihood of a stable epidemic in Ukraine. In a study of female sex workers (FSWs) in Odessa conducted in 1997 and 1999, the percentage of FSWs reporting always using condoms declined (from 49% to 40%).[4] A 1999 national reproductive health survey found that 27% of women reported condom use at the time of first sexual experience.[5]

A recent attempt to model the future course of the HIV/AIDS epidemic in Ukraine, developed an "optimistic" scenario, where HIV prevalence increased to 2% of the adult population by 2010, and a "pessimistic" scenario, where HIV prevalence increased to 5%.[6] While official statistics might indicate a stable epidemic, after more than two decades of global experience, no one should mistake the clear evidence that an explosive epidemic is ongoing in the Ukraine. Failing to acknowledge the true nature of an epidemic has yet to save any nation from its consequences.

J J Amon
Department of Preventive Medicine and Biometrics, Uniformed Services University of the Health Sciences, 4301 Jones Bridge Road, Bethesda, MD 20814, USA; joe_j_amon@yahoo.com

References

1 **Mavrov GI**, Bondarenko GM. The evolution of sexually transmitted infections in the Ukraine. *Sex Transm Infect* 2002;**78**:219–21.
2 **Eberstadt N**. The future of AIDS. *Foreign Affairs* 2002;**81**:22–45.
3 **Kobyshcha Iu**. The testing policy for HIV infection in Ukraine. *Zh Mikrobiol Epidemiol Immunobiol* 1999;**1**:65–7 (in Russian).
4 **Yaremenko A**, Balakireva O, Artyukh O, *et al. Cost-effectiveness analysis: aiding decision-making in HIV prevention in the Ukraine*. Kyiv, Ukraine: Ukrainian Institute for Social Research, 2002.
5 **CDC**. *Ukraine Reproductive Health Survey, 1999, Final Report*. Atlanta, GA: Centers for Disease Control and Prevention, September, 2001.
6 **Balakireva O**, Galustian Y, Yaremenko O, *et al. The social and economic impact of HIV and AIDS in Ukraine: a re-study*. Kyiv, Ukraine: Ukrainian Institute for Social Research, 2001.

Accepted for publication 16 December 2002

Raising awareness of UK GUM clinic activities

In their recent letter on the sexual health issues which face performers in the adult entertainment industry, Gabrielsen and Barton highlight the current lack of coherent sexual health infrastructure for this population in the United Kingdom.[1] The work of the AIM Health Care Foundation in the United States, is a valuable model which identifies the unique sexual health requirements of adult industry workers. By providing specialist care for the performers, AIM provides advice and information to a group whose specific needs have been globally poorly addressed. Evidence of this is provided by the large number of performers who choose to access AIM Health Care for their HIV tests in the United States.[2]

In the United Kingdom this would also seem to be the case, as the few adult performers who have any form of STI screening also prefer to use the facilities of private clinics.[3] The role of GUM clinics stretches beyond an authenticating agency for HIV certification, which should not be allowed to become the primary reason for contact between performers and GUM staff. Stronger emphasis needs to be placed on re-education within the UK industry to highlight the need for regular STI screening, health education and promotion. Especially since few performers have any form of regular STI screening either in their public or private lives.[4] We believe that it may be helpful to raise awareness of services offered by modern GUM clinics in the United Kingdom, by training and targeted information for adult performers.

By taking control of sexual health the industry will not only have healthy performers but will also provide the viewing public with a safer sex message that is portrayed in an entertaining, safe and non-threatening manner. Therefore, bearing in mind the complexities facing performers, the adult entertainment industry should be commended for working with core HIV/GUM services and piloting a study into the sexual health of adult performers. It will be of particular interest to see whether sexual health care can be provided for this group within the bounds of the NHS or whether they, like their American counterparts, will choose to rely on private clinics to provide them with care and information.

D Cawley, R Nandwani
The Sandyford Initiative, Glasgow, UK

Correspondence to:
Declan.Cawley@glacomen.scot.nhs.uk

References

1 **Gabrielsen L**, Barton SE. HIV negative certification and sexual health issues facing performers in the adult entertainment industry in the UK. *Sex Transm Infect* 2002;**78**:311.
2 **Morgan J**. *Adult film stars take aim at STDs*. AIM Health Care Foundation, www.aim-med.org, July 2000 (http://usatoday.com).
3 **Gabrielsen L**. Letter to models. (www.iusw.org/news/letter/html.)
4 **Barton SE**, Gabrielsen L. Defining the need to develop sexual health services for performers in the adult entertainment industry. Paper presented at IUSTI Europe 2002.

Accepted for publication 16 December 2002

Partner notification in primary care

In the past decade chlamydia tests have become more widely available in primary care, and many female patients are now diagnosed and treated in this setting.[1 2] The lack of skills and resources for partner notification in primary care is now a matter of public health concern.[3] We undertook a survey of GPs in three districts in order to explore their current practice and attitudes in relation to partner notification and treatment.

All GPs in the Nottingham Health District (n=367), and GPs recruited for the Chlamydia Partnership Project in north London (n=65) (a randomised trial of health adviser led partner notification for primary care patients) were invited to complete a short questionnaire. The response rate was 56%.

Of the 242 respondents, 86% considered testing for genital *Chlamydia trachomatis* infection in women to be a GP role, while 60.7% considered that partner notification is not a role of the GP; 90.5% of respondents thought that one or more patients had had a positive test at the practice in the preceding year.

Among GPs who had recently been involved in managing chlamydia, 82.5% always or sometimes managed the patient wholly within primary care; 70.1% said they "always" or "sometimes" managed partners. However, responsibility for ensuring this happened was generally devolved to the patient, since 73.8% "always," and 22.5% "sometimes" dealt with partner notification by telling the patient to get the partner treated.

GPs appeared to be well aware of the importance of contact tracing. Respondents were asked to state difficulties in managing chlamydia in free text form. Of 200 GPs stating one or more difficulties, 76.5% mentioned contact tracing. Other problems commonly cited were follow up or compliance (21.5%), explanation, supporting relationships and counselling (17.5% of respondents), perceived inadequacies of tests, mainly poor sensitivity and invasiveness (12.5%), and the diagnosis of coexisting infections (10.5%).

The majority of GPs (69.9%) would treat with an appropriate antibiotic of equal or greater dose and duration than that currently recommended by the Central Audit Group for